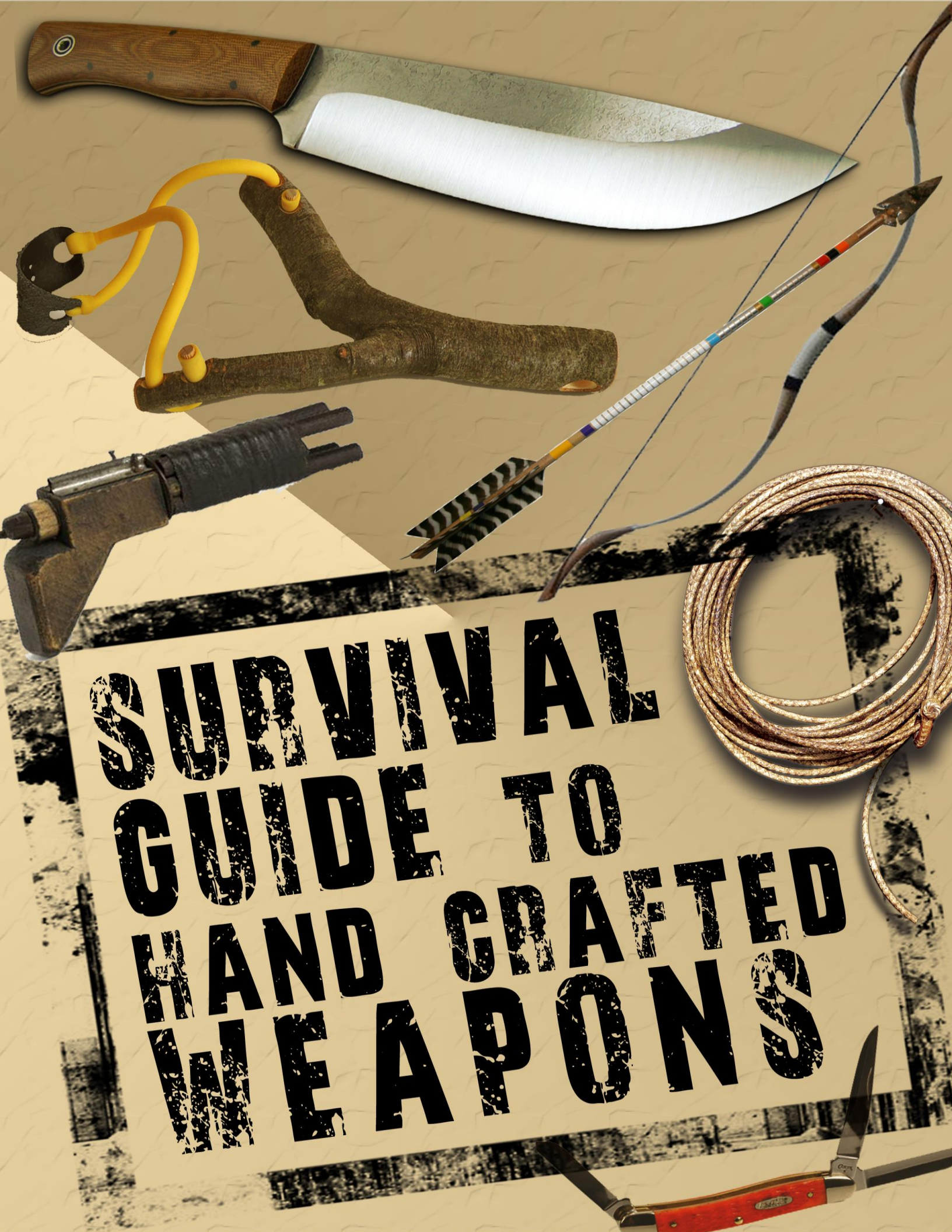
SURVIVAL
GUIDE TO
HAND CRAFTED
WEAPONS

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INTRODUCTION

Just imagine a group of armed thugs on your doorstep. All of them look threatening, angry, desperate, and violent. The manner in which they behave leaves no room for doubt. They are up to no good.

You realize that some of them may be armed. The situation seems frightful if not downright terrifying. It does not matter how these people got here: maybe it's because an EMP destroyed modern society as we know it and they are out scavenging for supplies or maybe a natural disaster so horrendous hit that life as we know it came to an end.

You know why they are here: they are out for your supplies… or even worse… they want to have a little "fun" with you or your loved ones. What is clear is that the police or any other state authority is not going to come to help.

What really matters in a situation like this is what you are going to do next. That is why what you are about to learn are proven defense methods to defend your home and turn away modern-day thugs, brutes, hooligans, and other contemporary threats.

These blueprints have been carefully designed and researched. Just keep in mind that in this situation the ends justify the means. And your primary goal is to keep yourself and your loved ones alive and well.

There are a couple of ways to accomplish this and you are about to discover some of the best: whether is creating obstacles in the path od the intruder or using weapons against them.

You will learn how to build a crossbow or catapult. These weapons do not need ammunition that is hard to come by and they have been proven efficient in home defense through out history.

You are about to learn the secrets to both offensive and defensive devices. Make no mistake: what you are about to find out both in terms of

defensive emplacements and weapons is dangerous maybe even lethal. Do not utilize these devices unless you absolutely have to.

GENERAL SAFETY GUIDELINES

Read the following disclaimers carefully:

1. The most blueprints contained inside are for devices that are dangerous. Take utmost caution during the building and testing phases. Please follow the exact designs. If you don't accidents may happen.
2. Read the entire blueprint before starting the project. It will give you an understanding of what you are building. Read until you fully understand what you are doing.
3. Use power tools according only according to the manufacturer's recommendations.

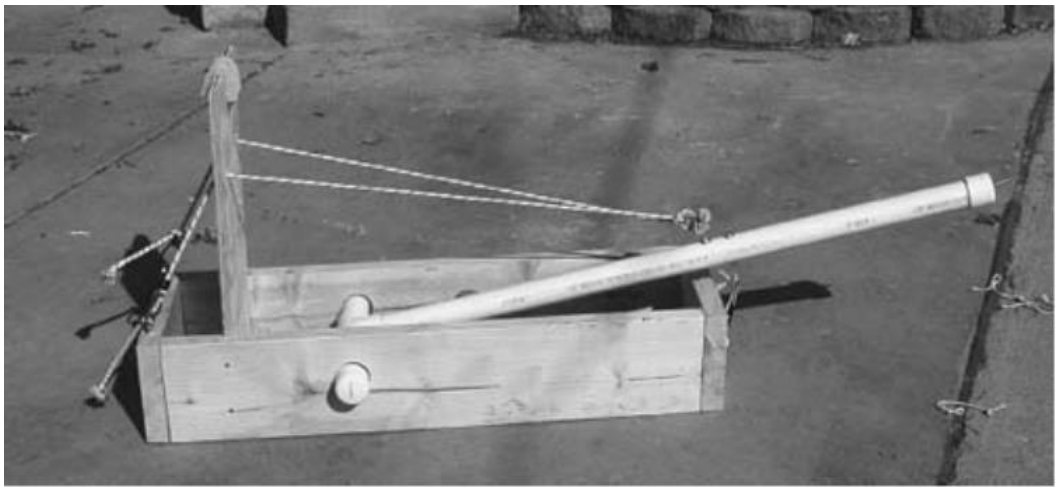
4. Please understand that therse are not toys. Treat them with respect. Do not leave these in the reach of children.

5. During building, wear appropriate protective gear.

6. Read the individual safety precautions for each project.

THE CROUCHING TIGER CATAPULT

Catapults are not only for knocking down walls. They can be a used to hurl stuff at people outside your home or shelter.



The advantages of this design of catapult are that, it is one of the simplest catapults that you can make, and despite it's size, it's powerful and accurate.

Be careful: the throwing arm rotates on a vertical plane smacks hard against the machine frame at the end of the swing.

Therefore you will need a solid frame to handle all the force. This model can be scaled up or down as you wish. The blueprints below are for a device that can throw small sized projectiles across and even beyond the typical backyard.

To build a larger catapult, you can use larger chunks of wood and substitute the elastic cords with large steel springs.

Materials:

- Safety Glasses
- (2) 2" × 8" boards, 36" long (These are for the sides of the catapult)

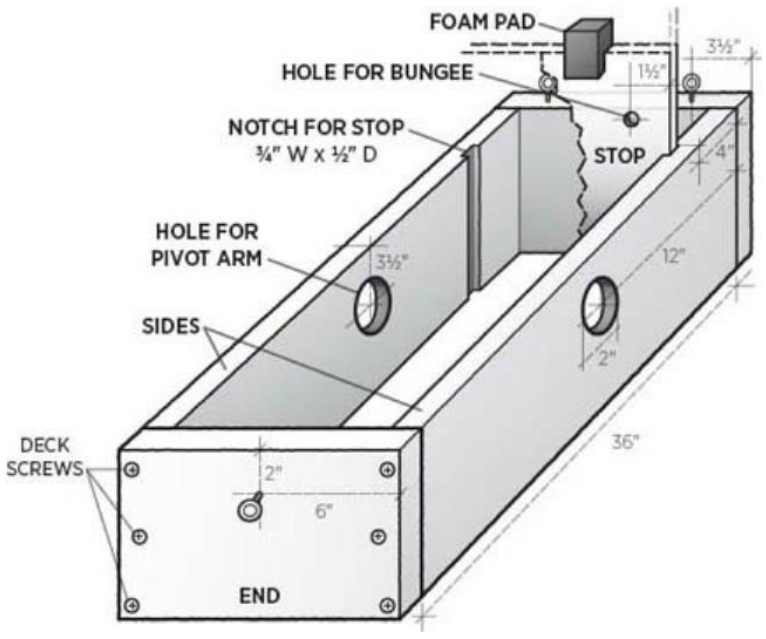
- 3/4" -thick plywood board, 10"× 24" (This is for the stop)
- Wood glue or staples
- 6" × 6" foam pad
- 1½" diameter PVC pipe, 43" long (This is the lever arm)
- Steel eye bolts 14" diameter, 2" long shaft (Eye bolts are threaded bolts that have an eye at the end for attaching a hook.)
- Nuts and washers
- 1½" diameter PVC pipes, 6" long: (These are the pivot arms)
- 1½" diameter PVC tee fitting
- PVC cement and primer
- (6) 2½" long deck screws
- 2" × 8" boards, 12" long (These are the ends of the catapult)
- 1½" diameter PVC end cap fittings
- #8 machine screw, 1½" long
- Nut & Washer
- Steel screw eyes, ¼" diameter, approximately 2" long shaft (Screw eyes are similar to eye

bolts except the ends are wood screws instead of threaded bolts.)

- Elastic (bungee) cords with hooks, nominally 20" long
- Trigger [see Step 11]
- Small water balloons or other small projectiles
- Threadlocker (e.g., Loctite)

Tools:

- Table saw or wood saw and 3" wide wood chisel
- 2" hole saw
- Electric drill with 3/4-inch spade bit, #18 twist drill, and Phillips head screwdriver bit



Directions:

1. Before you begin, be sure to put on your safety glasses.
2. Take the 36-inch, long boards; measure and mark on the face of each board, 4-inches from the one end.
3. Use the table or wood saw and wood chisel to cut a 3/4-inch wide by 1/2-inch deep, straight groove where you marked the board. These boards will make up the sides of your catapult frame.
4. In the face of both side boards, cut a 2" diameter hole, approximately 12" from the end and 8" from the grooves, using the hole saw. See diagram.
5. In the board that is for the stop, drill two (2) 3/4-inch holes, 2-inches from the top and 1 1/2-inches from the sides. See diagram.

Note: The bungee cords will pass through these holes in a later step. Make sure the ends of the cords will fit through the holes. If they don't, use a larger drill bit)

6. Glue or staple the foam pad to the center of the top of the stop.
7. In the 43-inch PVC lever arm, drill holes for the eye bolts, 17- and 19-inches from the end. See diagram.
8. Insert the eye bolts and fasten securely with washers and nuts.

Note: On the bolt closest to the end with the firing pin, position the bolt's loop upward. Place the bolt's loop downward on the bolt closest to the pivot arms.

9. Connect the lever arm, the pivot arms, and the tee fitting using the PVC primer and cement. See diagram. Don't attach the end caps at this time.

10. Insert the pivot arms into the 2-inch holes on the two side boards. Make sure the grooves of the side boards face inward.

11. Insert the plywood board into the grooves. See diagram.

12. Place the 12-inch boards at either end to create a box. Use the deck screws to fasten the wood pieces together.

13. Have someone hold the pieces so you can use the electric drill with the Philips head screw bit to make the box.

14. Place the end caps on the pivot arms. **DO NOT** use cement or primer to hold the end caps in place.

15. In the center of the remaining PVC end cap, drill a #18 sized hole in the center.

16. With the screw head on the inside of the cap, insert the #8 machine screw through the hole.
17. Using the threadlocker, fasten the screw securely with nuts and washers.
18. Attach the cap to the end of the lever arm using PVC primer and cement.

OPERATING THE CROUCHING TIGER CATAPULT

1. Carefully pull the throwing arm back. Remove or add bungee cords if the tension on the arm is too great or too little.

Use caution! Too much stress could break the catapult.

2. Latch the lever arm to the archery release, pelican hook, or panic snap.

Note: You may need to attach the trigger release to the trigger screw eye with a short loop of rope or carabiner, depending on the size and shape of the trigger selected.

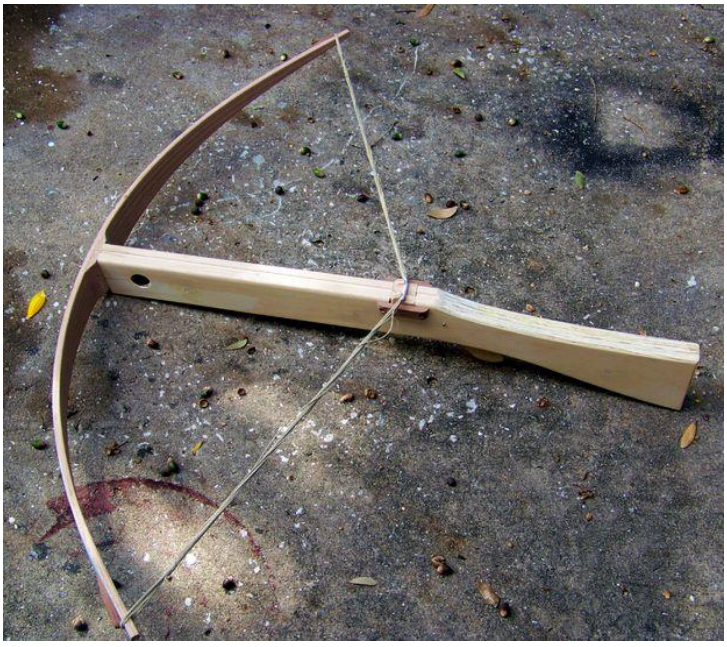
3. Release the arm and watch your projectile fly.

Safety Notes

1. Don't skimp on the padding as the lever arm can strike the stop with great force, depending on the strength and number of bungee cords used. To prevent the arm from breaking when it hits, make sure there is sufficient padding on the stop. Don't use too many bungee cords or stretch them excessively.
2. Be careful of the rotating lever arm! Keep well away from the plane of rotation of the lever arm, especially when the catapult is cocked and ready to fire.
3. Don't stand in front or behind the lever arm's plane of rotation.
4. Only use the catapult outside, in areas where the projectile can't do any harm.
5. Always wear safety glasses when working on projects of this nature and don't forget your common sense.

CARPINI'S CROSSBOW

Prior to the invention of the crossbow, archers would have to train for years before they developed the strength and proficiency to be an effective warrior.



After the crossbow was invented, even a peasant could be turned into a soldier with a small degree of training. With the use of mechanical cocking mechanisms, brute strength was no longer

necessary. The invention of the crossbow changed history.

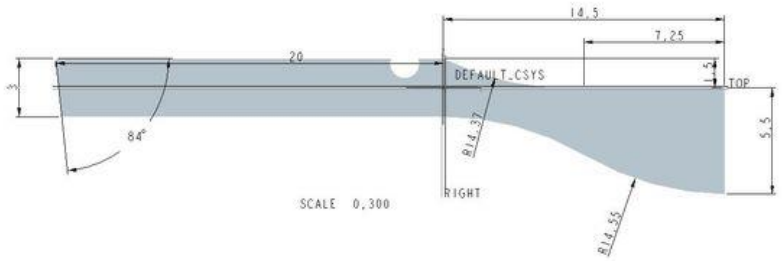
STEP ONE: BUILDING THE PROD, OR BOW

1. When creating the prod, or bow you want to make sure that the thickness is 7/16-inch. The overall length of the piece will reach 50-inches with a total width of 2 1/2-inches at the center and tapering to 1/2-inch at both ends.
2. Rather than tying the nocks on the ends of the bow, you will want to use hardwood pins to keep them in place.

Note: You will need to keep one edge of the bow straight.

3. You have the option of backing the bow with denim. To do this, coat the back of the bow with a coat of Titebond then roll a piece of denim down into the glue with a dowel.

STEP TWO: BUILDING THE STOCK

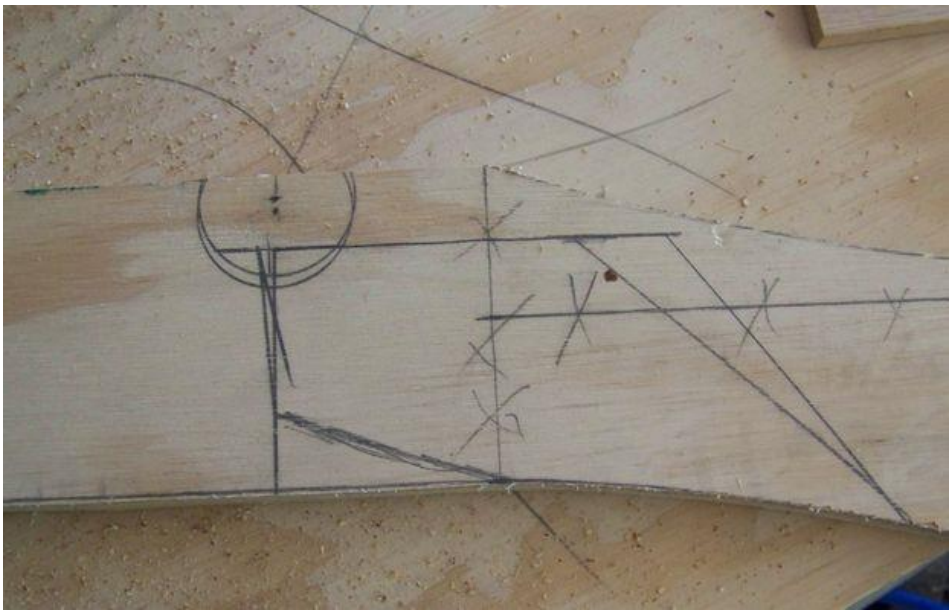


1. The stock consists of two rectangles, the first one measuring 3- by 20-inches and the second measuring 5 1/2 - by 14 1/2ch-inches, which is offset and joined with a spline.
2. Using the dimensions from the picture, cut two stocks from 3/4-inch plywood.
3. Screw the two pieces together with wood screws.

Note: The two pieces will need to be disassembled and reassembled several times.

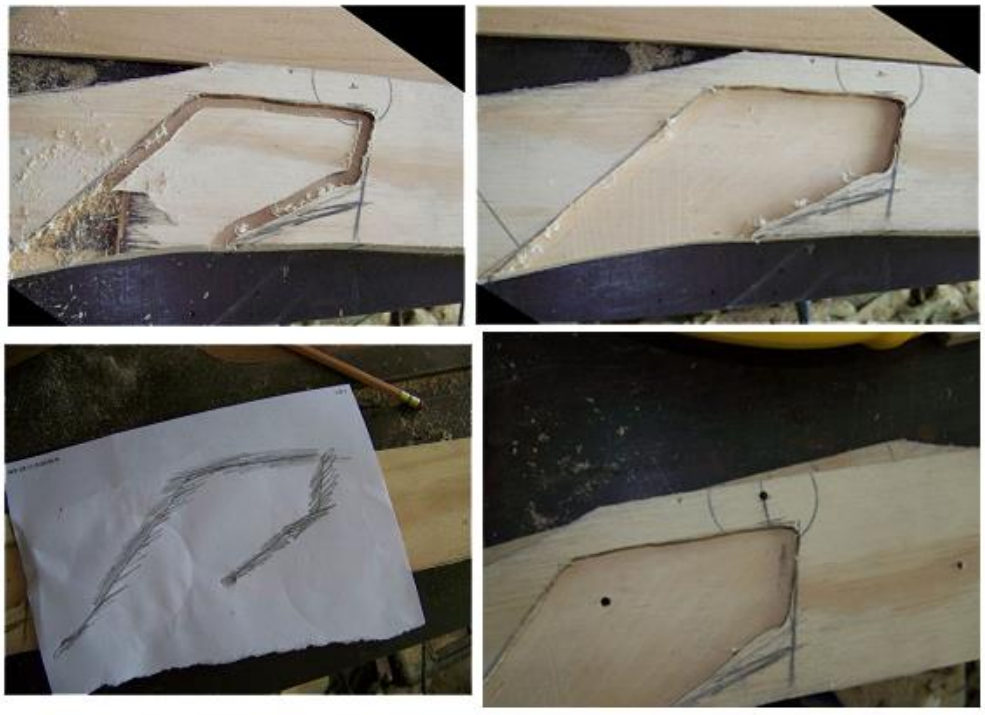
4. Even out the top edges of the stock pieces with a jointer. If you don't have a jointer, you can screw the stock pieces to a board and use a table saw to even out the top edges.
5. Check your work with a level. Both of the top edges must be flat and level for the crossbow to function properly.

STEP THREE: BUILDING THE LOCK



1. Disassemble the stock pieces.
2. One the inside face of one of the stock pieces, measure back 20-inches from the front of the stock, make a mark on the wood. Then, measure down 3/16-inch from the top and mark the wood.
3. Using a compass, draw a circle that is 1 1/2-inch in diameter.
4. From the bottom of the circle, measure up 1/4-inch and draw a line through the circle.
5. Drop a line from the 1/4-inch mark to the bottom of the stock piece.

6. Draw an orthogonal line from the end of the line that is inside the circle, out toward the end of the stock.
7. The area inside the lines will make up the trigger of the crossbow. The pivot for the trigger will be located in the area of the circle.
8. Use a router to clean out the area for the trigger. The depth should be 1/4-inch.
9. Place a piece of paper over the area and trace the outline. You will use this to transfer the pattern of the cut to the other stock piece.
10. Next, drill a hole at the center of the circle.



STEP FOUR: ASSEMBLING THE STOCK

1. Glue the two stock pieces together.

Note: Be careful not to fill the lock area with glue when you squeeze the two pieces together.

2. Secure the two stock pieces with the wood screws.

3. Attach a piece of 3/16-inch hardwood to the top of the stock.
4. When the glue has dried, drill a 1 1/2-inch hole where the lock position is going.

Hint: The center of the lock position is where you drilled the hole at the end of Step Three: Building the Lock.

5. Sand, the stock piece, using a router with a round over bit and belt sand to clean the piece up.

STEP FIVE: BUILDING THE NUT

1. The nut is the piece that holds the string when the crossbow is cocked.

   It needs to strong and be able to resist splitting.
2. Assembly a plywood and epoxy the pieces together. To make the piece stronger, try interspacing each layer with glass cloth.
3. When the block for the nut has cured, it needs to be turned until it is a slightly loose fit for the matching hole in the stock.

4. Cut away the bottom back half of the nut to form the sear, using the top back half to form the fingers that will hold the string.
5. Cut an additional notch for the bolt to be in contact with the string.

STEP SIX: BUILDING THE TRIGGER

1. Use the piece of paper with the lock cut out traced on it as a template for building the trigger.
2. Make sure the top edge of the trigger is flat.
3. The nose needs to be square with the top edge.

Note: The trigger has to be strong enough and small enough to hold the weight of the bow while still being able to rotate to allow the but to revolve.

4. Drill the pivot hole. The trigger must rotate completely out of the nut hole.

STEP SEVEN: ATTACHING THE PROD, OR BOW

1. Insert a bolt through the top of the prod and into the stock. Secure it with a nut hidden in a cross pin.

STEP EIGHT: THE STRING

1. Create an endless loop from a 16 strand piece of hemp string that is 48-inches long.
2. Secure the loop to the nocks on either side of the prod.

THE SMOKE BOMB

For those attacking you, you want to make life as unpleasant as possible. Here is a project that shows you how to make a smoke screen that will have your attackers fumbling around in a cloud of

fog. The amount of smoke that is produced by these little bombs can be increased if you should happen to run into a larger and more menacing threat.

MATERIALS

- Safety glasses
- Electronic scale
- 7 grams potassium nitrate (KNO3) Potassium nitrate is readily available on the Internet and is relatively inexpensive.
- Coffee grinder or mortar and pestle
- 4 grams powdered sugar
- 5 grams sodium bicarbonate (baking soda)

TOOLS

- Plastic container with tight-fitting lid
- Electric skillet or pot (you can also use a heat-proof bowl and electric hot plate)
- Heat proof plastic spatula
- Waxed paper
- Candy mold (optional)
- Spoon

- Homemade blackmatch or commercially manufactured Visco fuse (fuses can easily be found on the Internet by doing a search for "Visco fuse")
- Match or lighter

DIRECTIONS

1. Grind a small amount of the potassium nitrate (KNO3) into a fine powder using the coffee grinder or mortar and pestle.

Note: The coffee grinder that you use for grinding chemicals should NEVER be used for

grinding food. Only use it for grinding individual chemicals.

2. Measure the following materials using an accurate electronic scale:
   - 7 grams of potassium nitrate
   - 4 grams of powdered sugar
   - 5 grams of sodium bicarbonate (baking soda)
3. Place the ingredients in a container and close the lid, making sure it is tightly sealed.
4. Shake the container until all of the ingredients are thoroughly mixed.
5. Put your safety glasses on and take the rest of the materials outside.
6. Heat the electric hot plate to 285 degrees Fahrenheit.

Note: Do not use an open gas flame for any of the next steps.

7. Place the pot on the electric hot plate.
8. Add the all of the potassium nitrate, powdered sugar, and sodium bicarbonate mixture, stirring continuously with the spatula.

9. After two minutes, the mixture will begin to resemble runny peanut butter.
10. At this point, the mixture is ready to be shaped or poured into a mold.
11. Turn off the heat.

Note: if the mixture overheats, it has the potential to ignite.

12. Place the hot mixture on the wax paper.
13. Use a spoon to shape the mixture into a rough triangular mound, or pour it into a heatproof candy mold.
14. Cut a 2- to 3-inch length of the fuse and insert it into the mixture. (this length should provide approximately four to six seconds of burn time. For a longer burn time increase the length of the fuse.)
15. As the mixture cools, it will begin to harden.
16. After approximately 15 minutes, the smoke bomb will be ready to use.

Warning: Never hold the smoke bomb in your hand while lighting it, and never throw it when

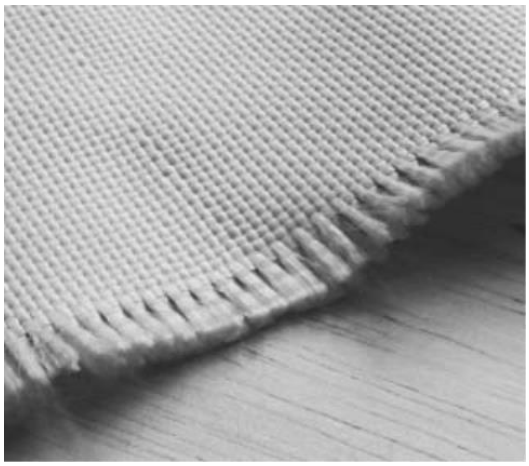
it is burning. Don't leave a lit smoke bomb in a closed container and don't carry any in your clothing.

THE HOMEMADE BACKPACK SHIELD

For thousands of years, warriors depended on their shields, made of heavy, impenetrable steel, to protect them from the onslaught of their enemies. The nearly impermeable material kept them safe from arrows and swords. As the years wore on, the shield gave way to the ballistic armor and flak jackets.

In 1965, DuPont developed a high-strength material that is five times stronger that steel, based on an equal-weight basis. In the 1970s, Lester Shubin and Nicolas Montanerelli, a pair of civilian US Army scientist, first recognized the potential of Kevlar as a bulletproof material. The two set out to test the idea, covering a telephone book with several layers of Kevlar and fired a shot from a .38-caliber handgun into the book. To their amazement, the bullet bounces off. The pair developed additional tests to determine exactly what they were dealing with. Kevlar passed all the tests.

With the look and feel of Kevlar resembling a heavyweight cotton canvas, it is an ideal fabric to use to make bulletproof clothing and panels. Today, police officers across the country are fitted with Kevlar vests while they are on duty.



Kevlar material can be a bit pricey. However, it is an easy fabric to work with and

can be used with inexpensive tools. Regular, household sewing machines have no problem hemming and joining Kevlar pieces together.

THE HIGH-TECH BACKPACK SHIELD

Note: Constructing a bullet-resistant shield that fits into a typical backpack could conceivably provide a measure of personal protection from a medium-caliber handgun, Don't Count on It! The following shield is "bullet and projectile resistant" it is NOT "bulletproof." There are some factors that can affect the penetration

power of a projectile, and there are no guarantees that the following panel will stop any projectile.

There are several different types of Kevlar fabric, each differing in elastic modulus. The type you will need for this bullet-resistant shield is the low elastic modulus type, which has a designation of Kevlar 29. The more common Kevlar 49 that you will find on the market is designed for making reinforced composites but will not work well for use against ballistic attack. Kevlar 29 can be purchased from fabric suppliers on eBay or by doing an Internet search for "Kevlar 29 fabric." You will also need to purchase a pair of affordable shears, as not all cutting shears will handle Kevlar fabric. There are several manufacturers that make affordable shears for cutting Kevlar, simply search online for "Kevlar sheers."

MATERIALS

- (2) Yards Kevlar 29 fabric

- One-quart all-purpose fiberglass resin with hardener (Fiberglass resin is usually available in hardware, auto parts, and home stores)

TOOLS

- Safety glasses
- Rubber gloves
- Tarp for workspace
- High-strength scissors
- Disposable mixing bowl
- Stir stick
- Wax paper
- Resin spreader (spatula)

DIRECTIONS

1. Put on your safety glasses and rubber gloves.
2. Cover your workspace with the tarp.

Note: Make sure you are working in a well-ventilated area.

3. Cut the Kevlar sheets into 15 identical panels. These should be the general width and height of

your backpack. (Approximately 10-inches by 12-inches).

Note: Kevlar is prone to fraying, even when it is cut with the right scissors. Avoid handling the panels once they have been cut.

4. In the disposable mixing bowl, mix eight ounces of the fiberglass resin with the included hardener. (Mix in additional resin as needed.)

Note: Avoid getting resin on your clothes, body, or anything else you care about, as it is extremely messy and hard to remove.

5. Use the wax paper to cover the work surface.

6. Place the first Kevlar panel on the wax paper and spread the resin over it using the resin spreader.
7. Place the next panel on top of the first panel and saturate it with the resin.
8. Continue this process until you have the desired thickness.

Note: Thicker panels with 12 or more sheets of Kevlar will have a higher chance of actually stopping a bullet.

9. When you have the desired number of layers, place a piece of wax paper on the top layer.
10. Spread 20 or more pounds of weight across the top of the wax paper.
11. Place the layered Kevlar in a well-ventilated place to dry.

USING YOUR SHIELD

Place the Kevlar shield in your backpack, resting on the side farthest from your body.

Protect your head and upper body with the shield in case you find yourself in trouble.

At the first opportunity, take flight or take shelter.

TESTING RESULTS

Using the directions outlined above, a 12-inch by 14-inch shield was constructed. The shield contained 12 pieces of Kevlar 29 that was laminated with fiberglass resin and hardener. With the help of a nationally recognized ballistics expert, the shield was put to the test.

Caliber	Handgun	Bullet Type	Result
.22 caliber	Sturm, Ruger Mark II Model 22/45 Target; 5½-inch barrel	Remington .22 caliber, high-velocity, 36 grain bullet	*Stopped*
.22 caliber	Colt Trooper Mk III, 6-inch barrel	Winchester .22 caliber magnum, high-velocity load, 40 grain, full metal jacket	The bullet penetrated the Kevlar shield, the backpack, and the wooden stand.
.380 ACP	Smith and Wesson Sigma SW380, 3-inch barrel	Winchester 380 ACP, 95 grain, full metal jacket	*Stopped*
9mm	Browning Hi-Power, 4⅝-inch barrel	Remington 9 millimeter, 147 grain Black Talon hollow point	*Stopped*
.40 S&W	Smith and Wesson Model 4006, 4-inch barrel	Winchester .40 S&W 165 grain, full metal jacket	*Stopped*
45 ACP	Colt Model 1911 Military, 5-inch barrel	Federal Cartridge .45 caliber M1911, 240 grain, full metal jacket	*Stopped*
.357 Magnum	Colt Python 6-inch barrel	Winchester .357 Magnum, 145 grain, Silvertip	*Stopped*
.44 Magnum	Smith & Wesson Model 29-2, 6-inch barrel	Hornady .44 Magnum, 240 grain, soft point	*Stopped*

The test consisted of firing several handguns, of various calibers, at the shield from seven yards

away. Each handgun was fired several times, and the results can be seen in the figure below. A pair of shooting chronographs was used to record the velocity of each shot, and the results were recorded. With the knowledge that this test did not have the same rigorous controls and staging that a government-certified test require for commercial products, the results were consistent.

The .22-calibur Magnum was the only bullet to penetrate all layers of the Kevlar. This is due to the small diameter of the bullet and the fact that it is fully clad in metal. This keeps the cross section small, even after it hit the shield. The bullet's energy was confined to a small area, only crossing a few of the fibers in the Kevlar fabric.

DISCLAIMERS AND MODIFIERS

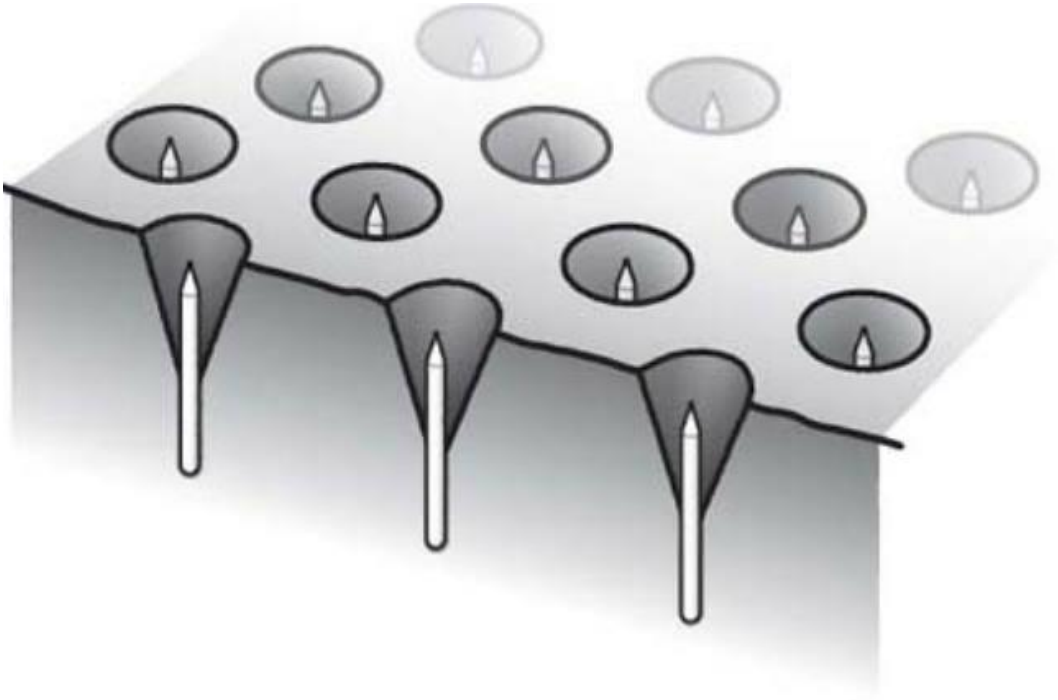
1. The power and penetration of a bullet is affected by the size of the bullet's powder load, the jacketing on the bullet, the material from which the bullet is made, and the distance from which the weapon is fired.

2. While the shield stopped every bullet with the exception of the .22 magnum during this limited test, under other conditions the shield will not stop these same bullets every time.
3. Ammunition fired from a rifle will most certainly not be stopped by this shield. Rifle bullets contain more energy and will shred the shield as if it were made of cardboard.
4. Even if the panel does stop a bullet, the force of the bullet may be transmitted through the backpack, with the potential of causing fatal blunt force traumatic injuries.

CREATING WOODEN OBSTACLES

William Tecumasch Sherman, a famous general for the Union during the Civil War, wrote, "temporary defenses like these enable a small force to hold off a superior one for a time, and time is the most valuable element in all wars." Knowing how to

quickly erect defenses from the materials you have on hand, can provide you with the extra time you need.



The first step to constructing a solid defense is reducing the number of routes from which an invader can approach. This means removing trees, hedges, and any other obstruction that can provide cover for invaders. These items should be no more than a foot high to give you the best possible advantage to spotting your enemies during their approach.

The next step in constructing a solid defense is to remove all flammable materials from the areas facing the expected direction of attack. Incendiary projectiles can ignite unexpected fires and draw your attention away from defending your home. Prepare yourself by placing containers of water in each room and sandbags in the windows to narrow the openings, leaving enough room to fire upon your enemies.

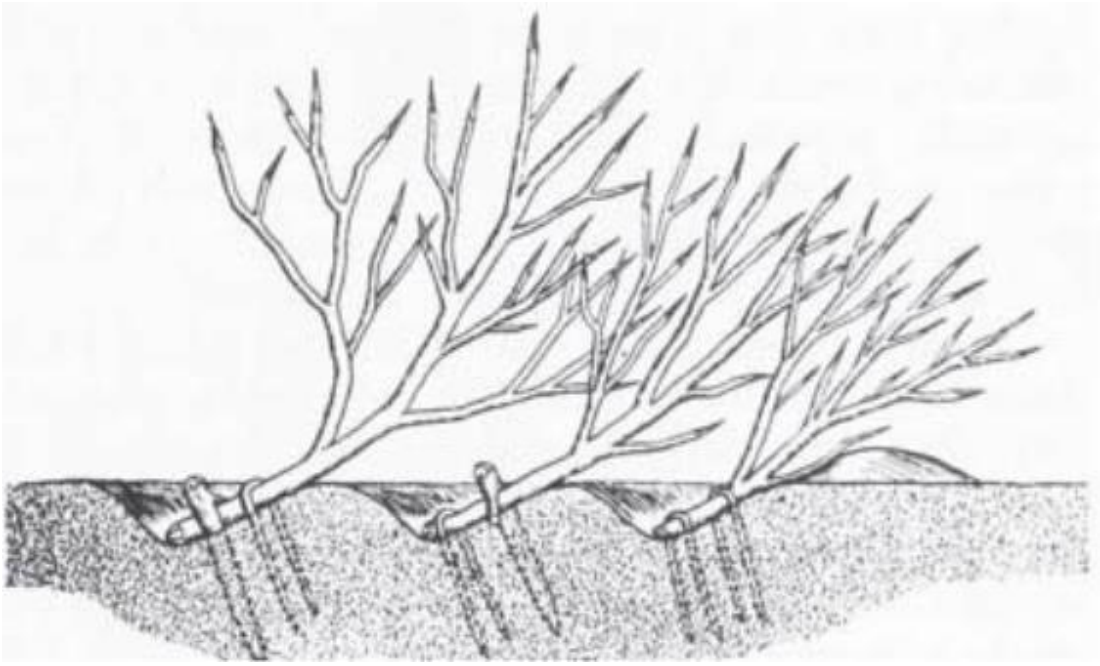
Once you are confident that the approaches to your home are cleared, and your house is prepared, you will need to begin constructing and installing your field expedient defenses. With a minimum amount of time and money, you can quickly build several types of defensive structures.

Pits (trous-de-Loup), Roughly translated as "wolf-holes," trous-de-loup's are military pits that can be made one of two ways, either deep or shallow.

The deeper pits reach a depth of 6-feet or more and are approximately 6-feet wide at the top, narrowing to a single foot in diameter at the bottom.

Setting up offset rows and equipping them with a set of sharpened stakes at the bottom, create a formidable defensive obstacle for any attacker. Shallow pits can also work to slow both infantry and cavalry charges. Note: Unless you are in imminent danger, you should only use the shallower pits, as the trous-de-loups are very dangerous.

Abatis



Quickly constructing a defensive obstacle from chopped trees is called an abatis. A matrix of thick, difficult to traverse branches will slow down any invaders. To create an abatis, chop down several

trees and place them on the approach to your property. Place the trees, so their branches interlace, with the larger branches pointing toward in the direction of the impending attack. To create an even more formidable challenge for invaders, sharpen the ends of the thicker branches and ensure they are pointing in the direction from where the attack is expected. Next, anchor the main trunks into the ground to make the trees more difficult to push out of the way. These types of field expedient defenses can slow down and impending attack.